

Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor Matthew A. Beaton Secretary

Karyn E. Polito Lieutenant Governor Martin Suuberg Commissioner

July 21, 2015

Richard Bigelow Mount Holyoke College College Street South Hadley, MA 01075

Re: PVAPCD – South Hadley Application # 1-R-05-016 Transmittal # W061730

Restricted Emission Status

RES Final Approval

Dear Mr. Bigelow:

The Department of Environmental Protection, Bureau of Waste Prevention, Western Regional Office ("MassDEP") issued on November 3, 2005 a Restricted Emission Status ("RES") Final Approval (RES #1-R-05-016) to Mount Holyoke College to restrict emissions of nitrogen oxides (NO_X) and sulfur oxides (SO_X) from their boilers at the facility. Mount Holyoke College is planning a gradual reduction in the use of No. 6 fuel oil in the facilities five steam boilers by converting both the boilers and fuel oil storage tanks to allow for the use of No. 2 fuel oil in phases over the next several years. Mount Holyoke College is requesting a modification of the existing RES approval to include the appropriate emission factors for No. 2 fuel oil to the RES calculation tables. The Department **approves** the amendment of the RES to include the emission factors for No. 2 fuel oil that must be used to calculate NO_X and SO_X emissions for both monthly and annual emission rates. The RES legally limits the amount of federal potential emissions from your facility through a restriction on emissions calculated from fuel use and/or other restrictions. All monthly and annual mass emissions limits remain unchanged by this amendment.

This RES Final Approval is being issued in accordance with 310 CMR 7.02(10) of the Air Pollution Control Regulations ("Regulations"), 310 CMR 7.00 as adopted pursuant to M.G.L. c.111, Section 142B and 142D.

Included as part of this RES Final Approval are the following:

- 1. Special Conditions for RES;
- 2. General Conditions for RES; and
- 3. Appeal Rights

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Notice of the proposal to approve the RES was published in The Springfield Republican on June 6, 2005 in accordance with the requirements of 310 CMR 7.02(10), and no comments were received.

Please review the entire RES Final Approval carefully as it stipulates the particular conditions the facility owner/operator must comply with for the facility to be operated in compliance with the Regulations.

MassDEP has determined that the filing of an Environmental Notification Form ("ENF") with the Secretary of Environmental Affairs, for air quality purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act and Regulation 310 CMR 11.00, Section 11.03, provide certain "Fail-Safe Provisions" which allow the Secretary to require the filing of an ENF and/or Environmental Impact Report at a later time.

Should you have any questions concerning this RES Final Approval, please contact Todd Wheeler at (413) 755-2297.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Marc Simpson Permit Chief Bureau of Air & Waste Western Region

cc: Ida McDonnell, EPA Region 1 (electronic copy to McDonnell.Ida@epa.gov)
Yi Tian, DEP, Boston (electronic copy)
Peter Czapienski, DEP, WERO (electronic copy)

I. SPECIAL CONDITIONS FOR RESTRICTED EMISSION STATUS APPROVAL

A. EMISSION LIMITS

1. Mount Holyoke College shall not exceed the emission limits and the mass emissions (monthly and yearly) of SO₂ and NO_X as indicated below:

Emission Unit	Emission Limits								Mass Emissions			
	SO ₂			NO _X				tons/month (2)		tons/year (3)		
	#6 fuel oil	#2 fuel oil	gas	#6 fuel oil	#2 fuel oil	gas	SO ₂	NO_X	SO ₂	NO _X		
Boilers 1 – 5	157 x S ⁽¹⁾ per 1000 gallons	142 x S ⁽¹⁾ per 1000 gallons	nil	55 lb per 1000 gallons	20 lb per 1000 gallons	100 lb per 106 ft ³	30	15	99.0	47.7		
emergency generators	0.29 lb per MMBtu heat input	0.29 lb per MMBtu heat input	nil	4.41 lb per MMBtu heat input	4.41 lb per MMBtu heat input	4.08 lb per MMBtu heat input	nil	1.3	nil	1.3		

- (1) percent sulfur in fuel by weight.
- (2) Based on a calendar month.
- (3) Based on a 12-month rolling total.

2. Mount Holyoke College shall calculate for each calendar month the mass emissions of SO₂ and NO_X from the boilers in accordance with the following factors:

Emission Unit		ре	tons SO ₂ r gallon oil buri	ned	tons NOx per gallon oil burned	tons NOx per gallon oil burned	tons NOx per million ft.³ gas burned	
	#6 Oil ≤ 2.2% S	#6 Oil ≤ 1.5% S	#6 Oil ≤ 1.0% S	#6 Oil ≤ 0.5% S	#2 Oil ≤ 0.05% S	All #6 oil	#2 oil	natural gas
Boilers 1 – 5	0.0001727	0.0001177	0.0000785	0.00003925	0.00000355	0.0000275	0.000010	0.05

B. PRODUCTION LIMITS – n/a

C. OPERATING LIMITS

3. Mount Holyoke College shall limit operation of each engine to periodic (no more frequent than weekly) test and emergency back-up power use only. Each emergency engine shall not operate for more than 300 hours per year, based on a 12 month rolling total.

D. MONITORING REQUIREMENTS

4. Mount Holyoke College shall install, maintain, and operate fuel flow meters to monitor the quantity of fuel consumed by the boilers, and hour meters to monitor the time of operation of the emergency engines.

E. RECORDKEEPING REQUIREMENTS

- 5. Mount Holyoke College shall record fuel consumption indicated by the fuel flow meters at least once per calendar month.
- 6. Mount Holyoke College shall calculate the mass emissions of SO₂ and NOx at least once per calendar month.
- 7. Mount Holyoke College shall record hours of operation of each emergency engine at least once per calendar month.

F. REPORTING REQUIREMENTS

8. Mount Holyoke College shall generate monthly reports in-house that document fuel use, emissions, and compliance with this approval.

If any emission limit is exceeded, Mount Holyoke College shall

- a. notify the Western Regional Office of the MassDEP via fax as soon as possible thereafter of the exceedance and its duration; and
- b. notify the MassDEP in writing no later than the 15th day of the following month, and
- c. within seven (7) days of the initial notification, mail to the MassDEP a copy of the subject monthly report, along with a description of the exceedance and a list of specific steps the facility is taking to prevent exceedances from happening again.
- 9. Mount Holyoke College shall submit to the MassDEP an annual compliance report by March 15th for the previous calendar year. The compliance reports will consist of copies of the in-house monthly reports.

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II. GENERAL CONDITIONS FOR RESTRICTED EMISSION STATUS APPROVAL

- <u>A.</u> <u>OPERATION</u> No person shall operate this facility except in conformance with the requirements established in this Restricted Emission Status Approval.
- <u>B. SUSPENSION</u> This approval may be suspended, modified, or revoked by the MassDEP if, at any time, the MassDEP determines that the facility is violating any condition or part of the approval.
- C. OTHER REGULATIONS This approval does not negate the responsibility of the owner/operator to comply with this or any other applicable federal, state, or local regulations now or in the future. Nor does this approval imply compliance with any other applicable federal, state or local regulation now or in the future.
- <u>D.</u> <u>EXISTING APPROVALS</u> All plan approvals issued under 310 CMR 7.02 prior to the effective date of this RES Approval shall continue to meet the emission rates and approved conditions specified in the applicable plan approval(s) unless specifically altered by this RES Approval.
- <u>E. VISIBLE EMISSIONS</u> The facility shall be operated in a manner to prevent the occurrence of visible emissions which cause or contribute to a condition of air pollution as defined in Regulation 310 CMR 7.01 and 7.06.
- <u>F.</u> <u>DUST AND ODOR</u> The facility shall be operated in a manner to prevent the occurrence of dust or odor conditions which cause or contribute to a condition of air pollution as defined in Regulation 310 CMR 7.01 and 7.09.
- <u>G. NOISE</u> Noise from the facility during routine operation, including startups and shutdowns, shall not exceed the MassDEP noise guidelines and shall not cause a condition of air pollution as defined in Regulation 310 CMR 7.01 and 7.10.
- <u>H.</u> <u>ASBESTOS</u> Should asbestos remediation/removal be required as a result of this RES Approval, such asbestos remediation/removal shall be done in accordance with Regulation 310 CMR 7.15.
- <u>I.</u> <u>MONITORING</u> Equipment or emission monitoring systems installed for the purpose of documenting compliance with this approval shall be installed, calibrated, maintained and operated in sufficient manner to ensure continuous and accurate operations at all times.
- J. <u>TESTING</u> Any emission testing to be compared to limitations in this approval must be conducted in accordance with the Environmental Protection Agency test methods as specified in the Code of Federal Regulations, Title 40, Part 60, Appendix A Standards of Performance for New Stationary Sources or by another method correlated to the above method to the satisfaction of MassDEP and in accordance with the requirements noted in 310 CMR 7.13.
 - In accordance with 310 CMR 7.04(4)(a), each fuel utilization facility shall be inspected and

maintained in accordance with the manufacturer's recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the permitted equipment.

- K. <u>RECORDKEEPING</u> A recordkeeping system shall be established and continued on site by the permittee. All records shall be maintained up-to-date such that year-to-date information is readily available for MassDEP examination. Record keeping shall, at a minimum, include:
 - 1. Compliance records sufficient to demonstrate that emissions have not exceeded what is allowed by this RES Approval. Such records may include daily production records, raw material usage rates, fuel purchase receipts, emissions test results, monitoring equipment data and reports.
 - 2. Maintenance: A record of routine maintenance activities performed on emission unit control equipment and monitoring equipment including, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
 - 3. Malfunctions: A record of all malfunctions on emission unit control and monitoring equipment including, at a minimum: the date and time the malfunction occurred; a description of the malfunction and the corrective action taken; the date and time corrective actions were initiated; and the date and time corrective actions were completed and the emission unit returned to compliance.
 - 4. All records shall be kept on site for five (5) years and shall be made available to MassDEP upon request.
- <u>L.</u> <u>REPORTING</u> In accordance with 310 CMR 7.12(7), the facility shall register on a form obtained from MassDEP such information as the MassDEP may specify including:
 - 1. The nature and amounts of emissions from the facility.
 - 2. Information which may be needed to determine the nature and amounts of emissions from the facility.
 - 3. Any other information pertaining to the facility which MassDEP requires.
 - 4. Information required by 310 CMR 7.12(1)(a) shall be submitted annually.
 - 5. The Regional Bureau of Waste Prevention, Compliance and Enforcement office must be notified by telephone or fax as soon as possible after the occurrence of any upsets or malfunctions to the facility equipment, air pollution control equipment, or monitoring equipment which result in an excess emission to the air and/or a condition of air pollution.
- M. MODIFICATIONS Any proposed increase in emissions above the limits contained in this RES Approval must first be approved in writing by MassDEP pursuant to 310 CMR 7.02. In addition, any increase may subject the facility to additional regulatory requirements.
- N. REMOVAL OF AIR POLLUTION CONTROL EQUIPMENT No person shall cause, suffer, allow, or permit the removal, alteration or shall otherwise render inoperative any air pollution control equipment or equipment used to monitor emissions which has been

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installed as a requirement of 310 CMR 7.00, other than for reasonable maintenance periods or unexpected and unavoidable failure of the equipment, provided that MassDEP has been notified of such failure, or in accordance with specific written approval of MassDEP.

Appeal Rights

This Final Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date you received this document.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts which are the grounds for the request and the relief sought. Additionally, the request must state why the Final Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100) must be mailed to:

Commonwealth of Massachusetts Department of Environmental Protection P. O. Box 4062 Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.